SPECIFICATIONS for DIGITAL ORTHOPHOTO MOSAICS

This document is a reference guide for consultants providing digital orthophoto mosaics and related products for us by the Central Federal Lands Highway Division (CFLHD) of the Federal Highway Administration (FHWA), Lakewood, Colorado.

A.   GENERAL DESCRIPTION

The service will involve the creation of digitally ortho-rectified mosaics of a corridor of road(s) outlined in the Scope of Work. These mosaics shall be derived from digital aerial photography described in *Specifications for Co-Located Digital Aerial Photography gkj25jul05.doc* using the Triangular Irregular Network (TIN) derived from LiDAR data described in *Specifications for LiDAR Services gkj25jul05.doc*.

B.   TECHNICAL REQUIREMENTS

1.   The Interpretation method shall be bilinear.

2.   There shall be no grid lines shown on the orthophoto.

3.   The background color shall be black.

4.   If feathering is used, the feather width shall be between 50 and 150 feet.

5.   The Ground Sample Distance (GSD) for the mosaics shall be not greater than 0.50 foot unless otherwise specified in the Scope of Work.

6.   Orthophoto Mosaics shall use the Bald Earth LiDAR TIN if they lie within 300 feet of the existing road or proposed mapping corridor. If the mosaic is to extend beyond the LiDAR TIN coverage, photogrammetrically derived terrain data may be used.

7.   Radiometric dodging to produce overall color and brightness balance shall be kept to the minimum needed to allow the clearest viewing of detail possible.

SPECIFICATIONS FOR DELIVERABLES

The Contractor shall provide to CFLHD orthophoto mosaic images in TIFF format with the appropriate TIF World File (TIFW) attached <u>and</u> in Microstation HMR format, if practicable. The maximum size of each TIF image shall not exceed 2 gigabytes (GB). These image files shall be delivered on DVD+R disks in ¼" jewel cases with disk labels and jewel case inserts stating the Contractor's name, date of photography and names and sizes of the files contained.